

Application Serial No.: 10/621,714
Reply to Office Action dated April 19, 2005

REMARKS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-7 and 18 are presently active in this case, Claims 1, 4, 6, and 7 having been amended, Claim 18 having been added, and Claims 8-17 having been canceled without prejudice or disclaimer by way of the present Amendment. Care has been taken such that no new matter has been entered. All of the amendments set forth herein are fully supported by the originally filed specification including the written description and drawings.

In the outstanding Official Action, Claims 1-7 were rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Claim 1 has been amended to change “0.06 nm” to “0.06 mm,” which is described on page 4, lines 19-23, of the present application. Accordingly, the Applicants respectfully request the withdrawal of the written description rejection.

Claims 1, 3, 4, and 6 were rejected under 35 U.S.C. 102(b) as being anticipated by Lawandy (U.S. Patent No. 5,919,607). Claims 5 and 7 were rejected under 35 U.S.C. 103(a) as being unpatentable over Lawandy. For the reasons discussed below, the Applicants respectfully request the withdrawal of the art rejections based on the Lawandy reference.

In the Office Action, the Lawandy reference is indicated as anticipating independent Claims 1 and 4. The Applicants note that a claim is anticipated only if each and every element as set forth in the claims is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). As will be demonstrated below, the Lawandy reference clearly does not

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meet each and every limitation of independent Claims 1 and 4.

Claim 1 recites a glass for a touch panel comprising a glass substrate having a first principal surface and a cut side face substantially perpendicular to the first principal surface, the cut side face at least partially formed by cutting with laser light radiation, wherein a surface roughness of the cut side face of the glass substrate is 50 nm or less, and a depth of a laser mark formed by the laser light radiation on the cut side face is 0.06 mm or more. The Lawandy reference fails to disclose a glass substrate having a first principal surface and a cut side face, as recited in Claim 1.

The Lawandy reference describes a photo-encoded selective etching for glass based microtechnology applications. The Lawandy reference describes methods and apparatuses for enabling a direct writing of desired features into a glass-based substrate. The Lawandy reference describes forming depressions in the surface of a glass substrate, for example, Figure 12a depicts an annular depression (54) in glass substrate (56). The Lawandy reference does not disclose a glass substrate having a first principal surface and a cut side face substantially perpendicular to the first principal surface, where the cut side face is at least partially formed by cutting with laser light radiation, and a laser mark is formed on the cut side face. This is evident from the fact that the Lawandy reference is concerned with the writing of features on the surface of the glass substrate, and not with cutting sides of the glass substrate. The Lawandy reference does not discuss cut sides of the glass substrate, nor the surface roughness of such features, nor laser marks on such features.

Accordingly, the Applicants respectfully submit that the Lawandy reference does not anticipate Claim 1 of the present application.

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Regarding Claim 4, the Official Action indicates that Figure 15 of the Lawandy reference discloses a laser mark on a surface of the substrate that has a depth different from another laser mark on another surface of the substrate. The Applicants respectfully traverse this rejection.

Claim 4 of the present application recites a glass for a touch panel comprising, among other features, a depth of a laser mark formed on a cut side face and a depth of another laser mark on a second cut side face are different. The Applicants note that the depths of features (76 and 78) in Figure 15 appear to be identical, although the shapes of the features are different. Since Claim 4 expressly recites that the depths are different, the Applicants submit that the Lawandy reference does not anticipate the subject matter recited in Claim 4 of the present application.

Accordingly, the Applicants respectfully request the withdrawal of the anticipation rejection of Claim 4.

Regarding Claim 7, the Official Action notes that the Lawandy reference fails to disclose the recited thickness of the glass substrate, yet indicates that such a feature is an obvious matter of design choice. The Applicants respectfully disagree. The Lawandy reference describes substrates that are of greater thickness than the thickness recited in Claim 7. Furthermore, the present invention does provide unexpected results in glass strength against cracking, as shown in Table 3, for example, with the combination of the recited depth of the laser mark and the recited thickness of the glass substrate. Such results are not discussed or even suggested by the teachings of the Lawandy reference.

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Thus, the Applicants respectfully submit that the rejection of Claim 7 is based on the improper application of hindsight considerations. It is well settled that it is impermissible simply to engage in hindsight reconstruction of the claimed invention, using Applicants' structure as a template and selecting elements from the references to fill in the gaps. *In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991). Recognizing, after the fact, that a modification of the prior art would provide an improvement or advantage, without suggestion thereof by the prior art, rather than dictating a conclusion of obviousness, is an indication of improper application of hindsight considerations. Simplicity and hindsight are not proper criteria for resolving obviousness. *In re Warner*, 397 F.2d 1011, 154 USPQ 173 (CCPA 1967).

Accordingly, the Applicants respectfully request the withdrawal of the obviousness rejection of Claim 7.

Claims 1-3 were rejected under 35 U.S.C. 103(a) as being unpatentable over Chiba et al. (U.S. Patent No. 6,287,996) in view of Jack (U.S. Patent No. 4,987,287) and Yoneda et al. (U.S. Patent No. 5,314,731). For the reasons discussed below, the Applicants request the withdrawal of the above obviousness rejection.

The basic requirements for establishing a *prima facie* case of obviousness as set forth in MPEP 2143 include (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings, (2) there must be a reasonable expectation of success, and (3) the reference (or references when combined) must teach or suggest all of the claim limitations. The Applicants submit that a *prima facie* case of

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obviousness cannot be established in the present case because the references, either taken singularly or in combination, do not teach or suggest all of the claim limitations.

As noted above, Claim 1 recites a glass for a touch panel comprising a glass substrate having a first principal surface and a cut side face substantially perpendicular to the first principal surface, the cut side face at least partially formed by cutting with laser light radiation, wherein a surface roughness of the cut side face of the glass substrate is 50 nm or less, and a depth of a laser mark formed by the laser light radiation on the cut side face is 0.06 mm or more. The cited reference, either taken singularly or in combination, fail to disclose a glass substrate having a first principal surface and a cut side face, as recited in Claim 1.

The Official Action notes that the Chiba et al. reference does not disclose a substrate that has a cut side with a surface roughness and laser mark as recited in Claim 1.

Additionally, the Jack and Yoneda et al. references describe etching or surface treating an outer surface of a glass substrate. However, these references do not disclose a glass substrate having a first principal surface and a cut side face substantially perpendicular to the first principal surface, where the cut side face is at least partially formed by cutting with laser light radiation, and a laser mark is formed on the cut side face. This is evident from the fact that the Jack and Yoneda et al. references are concerned with the etching and surface treating the surface of the glass substrate, and not with cutting sides of the glass substrate. Therefore, the Chiba et al. reference, the Jack reference, and the Yoneda et al. reference do not discuss cut sides of the glass substrate, nor the surface roughness of such features, nor laser marks on such features.

Accordingly, the Applicants respectfully submit that the cited references do not

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disclose, either singularly or in combination, all of the expressly recited features of Claim 1.

Thus, the Applicants request the withdrawal of the obviousness rejection of Claim 1 of the present application.

The dependent claims are considered allowable for the reasons advanced for the independent claim from which they depend. These claims are further considered allowable as they recite other features of the invention that are neither disclosed nor suggested by the applied references when those features are considered within the context of their respective independent claim.

Consequently, in view of the above discussion, it is respectfully submitted that the present application is in condition for formal allowance and an early and favorable reconsideration of this application is therefore requested.

Respectfully Submitted,

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